Claims as Currently Amended

Please withdraw claims 3 and 20.

1. (Original) A system for selectively enabling/disabling at least a portion of the operation of an implantable device in response to an externally applied pulsed magnetic field, wherein said implantable device is configured for stimulating tissue within a patient's body and said implantable device is contained within a sealed elongate housing having an axial dimension of less than 60 mm and a lateral dimension of less than 6 mm, said system comprising:

a sensor within said implantable device sensitive to the presence of an externally applied magnetic field;

a controller within said implantable device coupled to said sensor for monitoring the presence of said externally applied magnetic field and determining a timing sequence for the application and removal of said externally provided magnetic field; and wherein

said controller is configured to enable/disable at least a portion of the operation of a selected one of said implantable devices in response to detection of an identifiable timing sequence of the application and removal of said externally provided magnetic field.

(Previously amended) The system of claim 1 additionally comprising:

 a handheld device configured to be located external to the patient's body;

a mechanism, configured for activation by the patient, within said handheld device configured to provide an identifiable timing sequence of the application and removal of a magnetic field.

3. (Withdrawn)

- 4. (Original) The system of claim 2 wherein said mechanism is electromechanically powered.
- 5. (Original) The system of claim 1 additionally comprising: a handheld device configured to be located external to the patient's body; a coil within said handheld device suitable for generating a magnetic field when energized;

driver circuitry within said handheld device for energizing said coil;
a controller within said handheld device for generating a sequence of magnetic fields; and

a power source for powering said handheld device.

- 6. (Original) The system of claim 1 wherein said sensor comprises a magnetoresistive sensor.
- 7. (Original) The system of claim 1 wherein said sensor comprises a saturated core sensor.
- 8. (Original) The system of claim 1 wherein said sensor dissipates power when sensing a magnetic field and said implantable device additionally comprises circuitry for periodically applying and removing power from said sensor and sampling said sensor during time periods corresponding to when said power is applied.
- 9. (Original) The system of claim 1 wherein said sensor is configured for measuring the intensity of said externally applied magnetic field.
- 10. (Original) The system of claim 9 wherein said sensor comprises a magnetoresistive sensor.
- 11. (Original) The system of claim 1 wherein said sensor is configured for measuring the polarity of said externally applied magnetic field.

- 12. (Original) The system of claim 1 wherein said sensor is configured for measuring the intensity and the polarity of said externally applied magnetic field.
 - 13. (Original) The system of claim 12 wherein said sensor comprises:
 a magnetoresistive sensor; and
 a bias magnet.

Claims 14-17 (Withdrawn)

18. (Original) A system for selectively enabling/disabling at least a portion of the operation of an implantable device in response to an externally applied pulsed magnetic field, wherein said implantable device is configured for stimulating tissue within a patient's body, said system comprising:

a sensor within said implantable device sensitive to the presence of an externally applied magnetic field;

a controller within said implantable device coupled to said sensor for monitoring the presence of said externally applied magnetic field and determining a timing sequence for the application and removal of said externally provided magnetic field; and wherein

said controller is configured to enable/disable at least a portion of the operation of a selected one of said implantable devices in response to detection of an identifiable timing sequence of the application and removal of said externally provided magnetic field.

19. (Previously Amended) The system of claim 18 additionally comprising: a handheld device configured to be located external to the patient's body; and

a mechanism, configured for activation by the patient, within said handheld device configured to provide an identifiable timing sequence of the application and removal of a magnetic field.

- 20. (Withdrawn)
- 21. (Original) The system of claim 19 wherein said mechanism is electromechanically powered.

- 22. (Original) The system of claim 18 additionally comprising:

 a handheld device configured to be located external to the patient's body;

 a coil within said handheld device suitable for generating a magnetic field when energized;
- driver circuitry within said handheld device for energizing said coil;
 a controller within said handheld device for generating a sequence of
 magnetic fields; and

a power source for powering said handheld device.

- 23. (Original) The system of claim 18 wherein said sensor comprises a magnetoresistive sensor.
- 24. (Original) The system of claim 18 wherein said sensor comprises a saturated core sensor.
- 25. (Original) The system of claim 18 wherein said sensor dissipates power when sensing a magnetic field and said implantable device additionally comprises circuitry for periodically applying and removing power from said sensor and sampling said sensor during time periods corresponding to when said power is applied.
- 26. (Original) The system of claim 18 wherein said sensor is configured for measuring the intensity of said externally applied magnetic field.
- 27. (Original) The system of claim 26 wherein said sensor comprises a magnetoresistive sensor.
- 28. (Original) The system of claim 18 wherein said sensor is configured for measuring the polarity of said externally applied magnetic field.
- 29. (Original) The system of claim 18 wherein said sensor is configured for measuring the intensity and the polarity of said externally applied magnetic field.

30. (Original) The system of claim 29 wherein said sensor comprises: a magnetoresistive sensor; and a bias magnet.

Claims 31-34 (Withdrawn)